

VW STRAIN GAUGE (ARC WELDABLE)

INTRODUCTION:

The Arc Weldable VW Strain Gauges of PMT are designed and developed for arc welding to steel structure such as tunnel lining, piles and bridges. Typical applications include:

- Monitoring structural members of buildings and bridges during and after construction.
- Determining load changes on ground anchors and other post-tensioned support systems.
- Monitoring load in strutting systems for deep excavations.
- Measuring strain in tunnel linings and supports.
- Monitoring distribution of load in pile tests.

FEATURES:

- Rugged and reliable construction
- High accuracy
- Built in temperature sensor
- Built in surge protection
- Not affected by cable length and resistance

DESCRIPTION:

The Strain Gauge consists of two end blocks with a tensioned steel wire between them. As the steel or concrete surface that encompasses the strain gauge undergoes strain, the end block moves relative to each other causing a change in the wire tension and a corresponding change in its frequency of vibration.

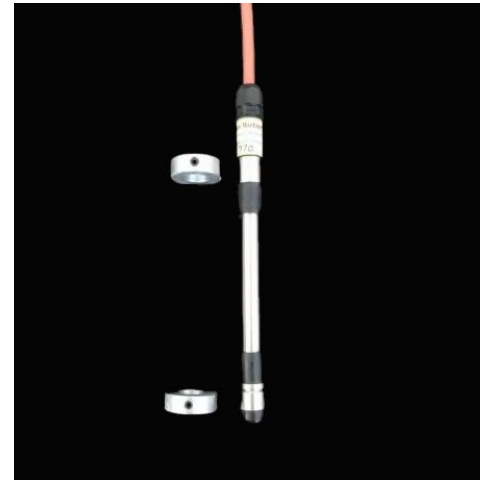
A VW readout/logger is connected to generate voltage pulses in the magnetic coil assembly which plucks the wire and measures/records the resulting resonant frequency of vibration.

SPECIFICATIONS:

Model	1501V-SG-AW
Sensor element	VW sensor
Range	3000 $\mu\epsilon$ ($\pm 1500 \mu\epsilon$)
Resolution	0.02% FSR
Accuracy	+/- 0.1% FSR
Operating temperature	-20 to 85 °C
Built in temperature device	Standard: RTD Optional: Thermistor
Temperature device range	RTD:-45 to 100°C Thermistor:-30 to 85°C
Material	All stainless steel
Built in lighting protection device	Gas tube arrester (Frequency output lines)
Signal cable	4core shielded cable with PVC jacket

Ordering Information	Model / Range
	Cable Length / Junction Box / Splicing Kit
	Readout / Logger/ Wireless

Dimensions and ranges are nominal only and can be modified to suit project requirements.



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SETUP